

## SAFETY DATA SHEET

Creation Date 14-May-2014

Revision Date 09-Feb-2024

Revision Number 5

### 1. Identification

**Product Name** Mercuric Acetate (Certified ACS)

**Cat No. :** M143I-50; M143I-100

**Synonyms** Mercury(II) acetate; mercury diacetate; mercuryl acetate

**Recommended Use** Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

##### **Emergency Telephone Number**

CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                                      |            |
|------------------------------------------------------|------------|
| Acute oral toxicity                                  | Category 2 |
| Acute dermal toxicity                                | Category 1 |
| Acute Inhalation Toxicity - Dusts and Mists          | Category 2 |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Target Organs - Kidney.                              |            |

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Fatal if swallowed  
Fatal in contact with skin  
Fatal if inhaled

May cause damage to organs through prolonged or repeated exposure



### Precautionary Statements

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not get in eyes, on skin, or on clothing  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not breathe dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear respiratory protection

#### Response

Get medical attention/advice if you feel unwell

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Immediately call a POISON CENTER or doctor/physician

#### Skin

Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN: Gently wash with plenty of soap and water  
Remove/Take off immediately all contaminated clothing  
Wash contaminated clothing before reuse

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth

#### Storage

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects  
WARNING. Reproductive Harm - <https://www.p65warnings.ca.gov/>.

## 3. Composition/Information on Ingredients

| Component        | CAS No    | Weight % |
|------------------|-----------|----------|
| Mercuric acetate | 1600-27-7 | > 98     |

## 4. First-aid measures

#### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

#### Eye Contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

|                                            |                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                          | Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Call a physician or poison control center immediately.                                                                                                                                                                                                                                                 |
| <b>Most important symptoms and effects</b> | None reasonably foreseeable.                                                                                                                                                                                                                                                                                                   |
| <b>Notes to Physician</b>                  | Treat symptomatically                                                                                                                                                                                                                                                                                                          |

## 5. Fire-fighting measures

|                                         |                                                                                       |
|-----------------------------------------|---------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>     | Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. |
| <b>Unsuitable Extinguishing Media</b>   | No information available                                                              |
| <b>Flash Point</b>                      | Not applicable                                                                        |
| <b>Method -</b>                         | No information available                                                              |
| <b>Autoignition Temperature</b>         | No information available                                                              |
| <b>Explosion Limits</b>                 |                                                                                       |
| <b>Upper</b>                            | No data available                                                                     |
| <b>Lower</b>                            | No data available                                                                     |
| <b>Sensitivity to Mechanical Impact</b> | No information available                                                              |
| <b>Sensitivity to Static Discharge</b>  | No information available                                                              |

### Specific Hazards Arising from the Chemical

Very toxic. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Do not allow run-off from fire-fighting to enter drains or water courses.

### Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

**Health**  
4

**Flammability**  
1

**Instability**  
1

**Physical hazards**  
N/A

## 6. Accidental release measures

|                                  |                                                                                                                                                                                                                                             |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>      | Ensure adequate ventilation. Avoid dust formation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.                                                         |
| <b>Environmental Precautions</b> | Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. |

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## 7. Handling and storage

|                 |                                                                                                                                                                                                                                                                          |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Wear personal protective equipment/face protection. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. |
| <b>Storage.</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct                                                                                                                                                                             |

sunlight. Keep locked up. Incompatible Materials. Strong oxidizing agents. Strong acids. Reducing Agent.

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component        | ACGIH TLV | OSHA PEL | NIOSH                                                                                       | Mexico OEL (TWA) |
|------------------|-----------|----------|---------------------------------------------------------------------------------------------|------------------|
| Mercuric acetate |           |          | IDLH: 10 mg/m <sup>3</sup><br>TWA: 0.05 mg/m <sup>3</sup><br>Ceiling: 0.1 mg/m <sup>3</sup> |                  |

### Legend

NIOSH: NIOSH - National Institute for Occupational Safety and Health

### Engineering Measures

Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

#### Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Recommended Filter type:

Particulates filter conforming to EN 143.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|                                        |                                                 |
|----------------------------------------|-------------------------------------------------|
| Physical State                         | Solid                                           |
| Appearance                             | White                                           |
| Odor                                   | vinegar-like                                    |
| Odor Threshold                         | No information available                        |
| pH                                     | No information available                        |
| Melting Point/Range                    | 178.9 °C / 354 °F                               |
| Boiling Point/Range                    | No information available                        |
| Flash Point                            | Not applicable                                  |
| Evaporation Rate                       | Not applicable                                  |
| Flammability (solid,gas)               | No information available                        |
| Flammability or explosive limits       |                                                 |
| Upper                                  | No data available                               |
| Lower                                  | No data available                               |
| Vapor Pressure                         | No information available                        |
| Vapor Density                          | Not applicable                                  |
| Specific Gravity                       | 3.3 (H <sub>2</sub> O=1)                        |
| Solubility                             | Partially soluble                               |
| Partition coefficient; n-octanol/water | No data available                               |
| Autoignition Temperature               | No information available                        |
| Decomposition Temperature              | No information available                        |
| Viscosity                              | Not applicable                                  |
| Molecular Formula                      | C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Hg |

Molecular Weight

318.68

## 10. Stability and reactivity

|                                         |                                                                              |
|-----------------------------------------|------------------------------------------------------------------------------|
| <b>Reactive Hazard</b>                  | None known, based on information available                                   |
| <b>Stability</b>                        | Stable under normal conditions. Light sensitive. heat sensitive.             |
| <b>Conditions to Avoid</b>              | Avoid dust formation. Incompatible products. Excess heat. Exposure to light. |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Strong acids, Reducing Agent                        |
| <b>Hazardous Decomposition Products</b> | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )                      |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.                                     |
| <b>Hazardous Reactions</b>              | None under normal processing.                                                |

## 11. Toxicological information

### Acute Toxicity

#### Product Information Component Information

| Component        | LD50 Oral                  | LD50 Dermal | LC50 Inhalation |
|------------------|----------------------------|-------------|-----------------|
| Mercuric acetate | LD50 = 40900 µg/kg ( Rat ) | Not listed  | Not listed      |

**Toxicologically Synergistic Products** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                        |                                                                                          |
|------------------------|------------------------------------------------------------------------------------------|
| <b>Irritation</b>      | No information available                                                                 |
| <b>Sensitization</b>   | No information available                                                                 |
| <b>Carcinogenicity</b> | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component        | CAS No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|------------------|-----------|------------|------------|------------|------------|------------|
| Mercuric acetate | 1600-27-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known  
**STOT - repeated exposure** Kidney

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

| Component        | Freshwater Algae | Freshwater Fish                               | Microtox   | Water Flea |
|------------------|------------------|-----------------------------------------------|------------|------------|
| Mercuric acetate | Not listed       | LC50: 0.025 mg/L/96h<br>(Pimephales promelas) | Not listed | Not listed |

**Persistence and Degradability** Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** .

| Component        | log Pow |
|------------------|---------|
| Mercuric acetate | -1.28   |

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

**DOT**

UN-No UN1629  
 Proper Shipping Name MERCURY ACETATE  
 Hazard Class 6.1  
 Packing Group II

**TDG**

UN-No UN1629  
 Proper Shipping Name MERCURY ACETATE  
 Hazard Class 6.1  
 Packing Group II

**IATA**

UN-No UN1629  
 Proper Shipping Name MERCURY ACETATE  
 Hazard Class 6.1  
 Packing Group II

**IMDG/IMO**

UN-No UN1629  
 Proper Shipping Name MERCURY ACETATE  
 Hazard Class 6.1  
 Packing Group II

### 15. Regulatory information

**United States of America Inventory**

| Component        | CAS No    | TSCA | TSCA Inventory notification -<br>Active-Inactive | TSCA - EPA Regulatory<br>Flags |
|------------------|-----------|------|--------------------------------------------------|--------------------------------|
| Mercuric acetate | 1600-27-7 | X    | ACTIVE                                           | -                              |

**Legend:**

**TSCA** - US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)**

Not applicable

**TSCA 12(b)** - Notices of Export

Not applicable

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component        | CAS No    | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|------------------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Mercuric acetate | 1600-27-7 | X   | -    | 216-491-1 | X     | X    | X    | X    | X     | KE-23115 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372. Note that PBT chemicals are not eligible for the de minimis exemption. For these chemicals, supplier notification limits are provided.

> 0 % = no low concentration cut-off set, supplier notification limit applies.

| Component        | CAS No    | Weight % | SARA 313 - Threshold Values % | SARA 313 - Reporting thresholds |
|------------------|-----------|----------|-------------------------------|---------------------------------|
| Mercuric acetate | 1600-27-7 | > 98     | > 0 %                         | RT = 10 lb                      |

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

| Component        | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Mercuric acetate | -                          | -                           | X                      | -                         |

**Clean Air Act**

| Component        | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|------------------|-----------|-------------------------|-------------------------|
| Mercuric acetate | X         |                         | -                       |

OSHA - Occupational Safety and Health Administration Not applicable

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

| Component        | Hazardous Substances RQs | CERCLA Extremely Hazardous Substances RQs | SARA Reportable Quantity (RQ) |
|------------------|--------------------------|-------------------------------------------|-------------------------------|
| Mercuric acetate | -                        | 500 lb                                    | -                             |

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

| Component        | CAS No    | California Prop. 65 | Prop 65 NSRL | Category      |
|------------------|-----------|---------------------|--------------|---------------|
| Mercuric acetate | 1600-27-7 | Developmental       | -            | Developmental |

**U.S. State Right-to-Know Regulations**

| Component        | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------|---------------|------------|--------------|----------|--------------|
| Mercuric acetate | X             | X          | X            | X        | -            |

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant Y

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

Mexico - Grade No information available

**Authorisation/Restrictions according to EU REACH**

| Component        | CAS No    | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances                                                            | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|------------------|-----------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Mercuric acetate | 1600-27-7 | -                                                                   | Use restricted. See item 18.<br>(see link for restriction details)<br>Use restricted. See item 75.<br>(see link for restriction details) | -                                                                                                     |

**REACH links**

<https://echa.europa.eu/substances-restricted-under-reach>

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component        | CAS No    | OECD HPV       | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|------------------|-----------|----------------|------------------------------|---------------------------|--------------------------------------------|
| Mercuric acetate | 1600-27-7 | Not applicable | Not applicable               | Not applicable            | Not applicable                             |

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

**Other International Regulations**

| Component        | CAS No    | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|------------------|-----------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------|------------------------------------|
| Mercuric acetate | 1600-27-7 | Not applicable                                                                            | Not applicable                                                                           | X                          | Annex I - Y29                      |

**16. Other information****Prepared By**

Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

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**Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**